

REMARKS

The Examiner's recognition of Applicants' invention by the allowance of all claims but claims 10 and 30 is gratefully acknowledged.

Claims 10 and 30 have been amended to more particularly point out that the embodiment of Applicants' invention in Figures 5 and 6 and described in paragraphs [0022] and [0023] comprises a first component formed of multiple devices, each having a terminal bonded to the joint structure.

Objection to Premature Final

The Office action was made Final. Applicants contend that such Action was premature, and respectfully request reconsideration as non-final.

According to MPEP §707.07(a), a second or subsequent action may be made final, except where the Examiner introduces a new ground of rejection. The present rejection cites and applies, for the first time, the IBM Technical Disclosure Bulletin. This then is a new ground. The Office Action alleges that Applicants' amendment necessitated the new grounds. However, a careful review of claims 10 and 30, the only claims rejected in the present Office Action, reveals that the prior amendments to these claims did not introduce any new matter into the case that had not previously been considered by the Examiner. Consequently, Applicants believe that the previous amendments could not have necessitated the citation of new art or the new ground of rejection.

Applicants only seek an opportunity to respond to the IBM document, and accordingly request that the finality of the Action be withdrawn, and that the present

amendments be entered and given full considered.

In the event that the finality of the Action is not withdrawn, Applicants' request that the amendments be entered nevertheless, as they only seek to clarify terms already called out.

Claim Rejection under 35 USC § 103

Claims 10 and 30 were rejected under 35 U.S.C. § 103 as unpatentable over United States Patent Number 4,529,836, issued to Powers et al. in 1985, in view of United States Patent Number 4,529,836, issued to Kwitkowski et al. in 1992, in view of United States Patent Number 6,083,772, issued to Bowman et al. in 2000, and further in view of United States Patent Number 5,903,439, issued to Tamarkin in 1999, and still further in view of IBM Technical Disclosure Bulletin NN 600469, published in 1960.

Claims 10 and 30 are directed to the embodiment of Applicants' invention depicted in Figures 5 and 6 and described in paragraphs [0022] and [0023]. In this embodiment, the mesh joint structure bonds multiple terminals of multiple devices of a first component to conductor on a second component.

Powers et al. describes a device that includes a mesh joint, but, as noted in the rejection, does not teach or suggest utilizing the mesh joint to make electrical connections. Moreover, it does not show bonding multiple devices to a conductor with electrical connections to the terminals thereof, as set forth in the rejected claims.

Kwitkowski et al. describes an omega connector that couples a single terminal on one component to a single terminal on another component, but does not teach or suggest connections to multiple terminals of multiple devices for one component. Bowman et al. describes a method of mounting a power semiconductor die on a substrate using an electrically conductive strap to connect a single terminal on the die to a single terminal on the substrate. It does not contemplate a joint structure containing a mesh or connected to multiple terminals of multiple devices. The rejection points to an epoxy infiltrated mesh connection in Tamarkin. However, the mesh in Tamarkin is a conventional FR4 substrate, and so does not suggest a solder infiltrated joint structure between components.

Thus, none of the previously cited references shows a joint structure formed of a flexible mesh infiltrated by solder and bonded to first and second components, wherein the first component comprises multiple terminals of multiple devices, and wherein the joint structure bonds the multiple terminals to the second component. The rejection now points to the IBM Document. The IBM Document shows a single component connected to solder-infiltrated copper screen joints. However, it does not show multiple devices with multiple terminals bonded to a conductor. Thus, even when combined with the aforementioned four references, the combination still lacks any teaching that would point the practitioner to a mesh joint structure bonding a first set of terminals of multiple devices making up a first component, to a conductor of a second component, as in this aspect of Applicants' invention.

Claim 10 is directed to the aspect of Applicants' invention that is an electrical

circuit assembly that includes a joint structure bonding two components together. The joint structure comprises a flexible mesh infiltrated by a solder material. The claim is amended to more particularly point out that each of the multiple devices that make up the first component has a terminal bonded to the joint structure. None of the references teach or suggest this feature set forth in claim 10.

Claim 30 is directed to Applicants' method of bonding two components together that uses a joint structure of a flexible mesh infiltrated by solder material. As set forth in the claim, the first component comprises multiple electrical devices, each having a terminal. The terminals are bonded to the mesh to hold the electrical devices together and attach the first component to the conductor of the second component. None of the references, nor their combination, show multiple devices having terminals bonded together, forming a first component, and to a conductor of a second component. Therefore, the references, even when all five are combined, do not suggest Applicants' claim 30.

Therefore, it is respectfully requested that the rejection of the claims 10 and 30 under 35 U.S.C. § 103 be reconsidered and withdrawn, and that the claims be allowed, together with the remaining allowed claims.

Conclusion

It is believed, in view of the amendments and remarks herein, that rejection of the claims 10 and 30 have been addressed and overcome, and that these claims are in condition for allowance, along with already allowed claims 1-5, 7-9, 11-17, 19-25, 27, 29, 31-37, 39, and 40. If it would further prosecution of the application, the Examiner is urged to contact the undersigned at the phone number provided.

The Commissioner is hereby authorized to charge any fees associated with this communication to Deposit Account No. 50-0831.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Douglas D. Fekete", written over a horizontal line.

Douglas D. Fekete

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